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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,769	01/28/2004	Peter Heiligensetter	71278	3236
23872	7590	05/03/2005		
			EXAMINER	
			NOORI, MAX H	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/766,769	HEILIGENSETZER ET AL.
	Examiner	Art Unit
	Max Noori	2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-6 and 8-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6 and 8-20 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Pollack.

Regarding claims 1, 11, Pollack discloses a method and apparatus for monitoring and controlling linear motor robot with features of the claimed invention including detecting plurality of measured values (such as a first and second acceleration detection means (see claim 11), which can be processed to measuring results and first and second difference values resulting from the comparison of the detecting means, and means for comparing the results with a predetermined threshold as a reference value.

Regarding claims 8-9, the comparison includes means to provide safe limit tolerance (see claim 11, col. 13, line 40-43).

Regarding claim 10, emergency interrupt signal is generated upon exceeding the predetermined limit (see, for example, claim 14).

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 6, 8, 12-14, 16-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Petersen.

Although the acceleration detecting device are generally equivalent to a force or a load sensor, and therefore, possibly a strain gauge, but Pollack does not elaborate on the nature of his detectors. However, in the art of measuring two measured quantities in moving machinery, correlating the acceleration to a force sensor or a strain gauge is notoriously known. For example, Petersen is presented to show such assertion. Petersen discloses a sensing apparatus for sensing two physical quantities (see claim 1), suggesting that strain gauge can equivalently be used as force, acceleration and strain measuring means (see claims 3 and 5). Therefore, it would have been obvious for a skilled artisan at the time of the invention to modify Pollack device to use any kind of desired acceleration sensor such as strain gauges.

5. Claims 5, and 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack in view of Petersen.

The use optical force/strain sensing means is only a matter of a specific expedience, which is generally suggested by a desired intended use or convenience. Nevertheless the use of such sensor is well known in the art. Lestelle for example is presented to show such sensor. Lestelle discloses pickups for measuring force, teaching the use of an optical means (see claim 9) as an alternative force sensor. Therefore, it would have been obvious for a skilled artisan at the time of the invention to modify Pollack to use any force/strain sensor such as an optical one, in

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order to fit the a required environment for a specific application for more accuracy or for a contact free circumstance.

***Response to Arguments***

6. Applicant's amendment and arguments filed on 3/16/05 have been fully considered but are moot in view of the new grounds of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Max H. Noori whose telephone number is (571) 272-2185. The examiner can normally be reached on Tuesday-Friday from 8:00 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The central fax number is (703) 827-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHN

Wednesday, April 27, 2005



**MAX NOORI**  
**PRIMARY EXAMINER**